

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A boring device comprising:

- a boring tool;
- a guide for restricting a moving direction of the boring tool;
- a vibrator for applying ultrasonic vibrations to the boring tool to make the boring tool jump; and
- a float retention member for retaining the boring tool in a floating state at a specified position and for generating a restoration force to return the boring tool at least up to a position where the boring tool comes into contact with the vibrator when the boring tool is displaced from the specified position.

2. (Original) The boring device according to claim 1, wherein the float retention member returns the boring tool to the specified position when the boring tool is displaced from the specified position.

3. (Original) The boring device according to claim 1, comprising a pressing device for pressing the vibrator towards the boring tool.

4. (Currently Amended) The boring device according to claim 1, wherein the vibrator repeatedly applies the ultrasonic vibrations to the boring tool.

5. (Currently Amended) The boring device according to claim 2, wherein the vibrator repeatedly applies the ultrasonic vibrations to the boring tool.

6. (Currently Amended) The boring device according to claim 3, wherein the vibrator repeatedly applies the ultrasonic vibrations to the boring tool.

7. (Currently Amended) A boring method for boring an object to be bored comprising:

- retaining a boring tool in a floating state at a specified position inside a guide that restricts a moving direction;

applying ultrasonic vibrations to the boring tool using a vibrator to make the boring tool jump towards the object to be bored;
making the boring tool strike the object to be bored; and
returning the boring tool having been displaced from the specified position at least up to a position where the boring tool comes into contact with the vibrator.

8. (Original) The boring method according to claim 7, wherein the boring tool having been displaced from the specified position is returned to the specified position.

9. (Currently Amended) The boring method according to claim 7, wherein when the vibrator applies ultrasonic vibrations to the boring tool to make the boring tool jump towards the object to be bored, the boring tool is made jump while being pressed towards the object to be bored.

10. (Currently Amended) The boring method according to claim 7, wherein the vibrator repeatedly applies the ultrasonic vibrations to the boring tool.

11. (Currently Amended) The boring method according to claim 8, wherein the vibrator repeatedly applies the ultrasonic vibrations to the boring tool.

12. (Currently Amended) The boring method according to claim 9, wherein the vibrator repeatedly applies the ultrasonic vibrations to the boring tool.